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EXAMINER	
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ART UNIT	PAPER NUMBER
2458	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/750,170	GROBMAN ET AL.	
	Examiner	Art Unit	
	Jeffrey Seto	2458	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-14,21-36,38-43 and 50-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-14,21-36,38-43 and 50-54* is/are rejected.

7)☒ Claim(s) *6,21,26,35 and 50* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-7, 9-14, 21-36, 38-43 & 50-54 are pending.

Response to Amendment

2. In response to the Amendment filed 7-7-2009:

   a. The Objections to claims 6, 8, 19, 21, 26, 35, 37 & 48 are withdrawn;

   b. The Rejection of claims 8 & 37, under 35 USC 101, are withdrawn; and,

   c. The Rejection of claims 10 & 39, under 35 USC 112, are withdrawn.

Response to Arguments

3. Applicant's arguments filed 7-7-2009 have been fully considered but they are not persuasive. Regarding Applicant's argument that the rejection of claims 30-54 under 35 USC 101 has been overcome because the claims are explicitly directed to tangible storage medium. The language used in the claims is "machine readable storage medium". Page 6, lines 10-11, of the Specification states "Machine readable media includes any mechanism that provides (i.e., stores and/or transmits) information in a form readable by a machine (e.g., a computer)." Thus, the Specification includes storage in the definition of "machine readable media". Page 6, lines 12-15, of the Specification states in part "machine readable medium includes...electrical, optical, acoustic or other forms of propagated signals (e.g., carrier waves, infrared signals, digital signals, etc.)." Thus, the Specification also includes signals and waves in its definition of "machine readable medium". It is proper to look to the Specification to find

the definition of a phrase that is used in the claims. In this case, the definition of "machine readable storage medium" was found to include non-statutory subject matter, i.e., waves and signals. Applicant can overcome this rejection by reciting "non-transitory" machine readable storage medium, in the claims.

4. Regarding Applicant's argument that Parham teaches only one optimization technique, and not a plurality of optimization techniques. The preferred embodiment of Parham teaches an optimization technique that is used to find the "shortest path" between two servers. However, Parham also teaches that the units used to represent the links between servers, in the optimization technique, can also be used to represent other factors as well, such as costs (See column 4, lines 52-53). Parham also teaches the optimization technique should be customized to the type of network architecture that is in place (See col. 7, lines 11-17; wherein a different optimization technique is used for a network architecture that includes read-only servers). Thus, Parham teaches more than one, or a plurality of, optimization techniques.

5. Regarding Applicant's argument that Parham does not teach an optimization technique identifier. Parham was not cited in the prior art rejection as teaching an "identifier". Parham was cited for teaching an "optimization technique". Kepler was cited for teaching the use of an "identifier" in a request (See col. 6, lines 21-24 & col. 14, lines 16-18; wherein the "route by" field, includes an identifier).

Claim Objections

6. Claims 6, 21, 26, 35 & 50 are objected to because of the following informalities:

7. Regarding claims 6, 21, 26, 35 & 50, each claim contains the same error, in the newly added material; in lines 6-8 of each claim, except claim 26, wherein the error is in line 12. In each claim, "associated with respective a optimization technique", should be changed to "associated with a respective optimization technique". Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 30-36, 38-43 & 50-54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

9. Regarding claims 30-36, 38-43 & 50-54, each claim recites a "machine readable storage medium". Page 6, lines 10-11, of the Specification states "Machine readable media includes any mechanism that provides (i.e., stores and/or transmits) information in a form readable by a machine (e.g., a computer)." Thus, the Specification includes storage in the definition of "machine readable media". Page 6, lines 12-15, of the Specification states in part "machine readable medium includes…electrical, optical, acoustic or other forms of propagated signals (e.g., carrier waves, infrared signals, digital signals, etc.)." Thus, the Specification also includes signals and waves in its definition of "machine readable medium". Since the Specification defines terms used in the claims, and Applicant's definition of "machine readable storage medium" includes

non-statutory subject matter, i.e., waves and signals, the above claims are ineligible for patenting.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 2, 5, 11, 30, 31, 34 & 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,103,589 issued to Kepler, et al. (Kepler), in view of U.S. Patent No. 6,879,564 issued to Parham, et al. (Parham).

2. Regarding claim 1, Kepler teaches a method comprising: receiving a first request to perform a write operation on one of a plurality of data stores, wherein the one of the plurality of data stores is undetermined (See column 3, lines 32-34, and col. 15, lines 64-65; wherein the request can be a write), and wherein the first request includes an identifier of a plurality of possible identifiers each associated with a respective technique of a plurality of possible techniques (See col. 6, lines 21-24 & 30-34, and col. 14, lines 16-18; wherein each field, including the "route by" field, includes an identifier, and wherein each field, including the "city" field, has a plurality of possible identifiers); creating a second request, wherein the second request requests performance of the write operation (See col. 3, lines 34-36; wherein the modified search request is the second request); determining the one of the plurality of data stores to which the second

request will be transmitted (See col. 3, lines 36-37; wherein the examination of the search-routing database determines "the one"); and transmitting the second request to the one of the plurality of data stores (See col. 3, lines 40-42; wherein the request is sent to the database identified in the search-routing database). Kepler does not disclose that the data stores are multi-master data stores, the identifier is an optimization technique identifier associated with one of a plurality of optimization techniques, nor that the determining includes using the optimization technique associated with an optimization technique identifier. However, Parham teaches the data stores are multi-master data stores (See col. 1, lines 45-48), one of a plurality of optimization techniques (See col. 4, lines 35-45 & 52-53; wherein the disclosed algorithm can be used to optimize bandwidth, cost, speed, distance or other factor; and col. 7, lines 11-17; wherein the optimization technique is customized based on network topology), and that the determining includes using the optimization technique (See col. 4, lines 54-57). Using the features of Parham in the system of Kepler would have expanded the capabilities of Kepler to included distributed databases, and would have made the system more cost effective and efficient by allowing the system to use the most efficient paths to desired databases. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

3. Regarding claim 2, Kepler teaches the plurality of data stores are directory servers (See col. 5, lines 4-6, and col. 7, lines 3-6).

4. Regarding claim 5, Parham teaches the first request includes additional optimization technique identifiers (See col. 7, lines 43-46; wherein a technique other than "shortest path" is disclosed for replication purposes). Using the features of Parham in the system of Kepler would have increased the abilities of Kepler to included multi-master databases, and would have made sure that the most cost effective paths, between write-able databases, were used during the replication process. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

5. Regarding claim 11, Kepler teaches a method comprising: creating a first transaction request, wherein the first transaction request includes an identifier for determining to which one of a plurality of servers a second transaction request is transmitted (See col. 3, lines 32-34, and col. 14, lines 16-18; wherein the route-by field is the identifier), the identifier being associated with a respective technique of a plurality of possible techniques (See col. 6, lines 21-24 & 30-34; wherein each field, including the "route-by" field, includes an identifier, each identifier can be a technique, and there are a plurality of possible identifiers/techniques); and transmitting the first transaction request to an intermediate server (See col. 3, lines 34-37; wherein the search-routing database is the intermediate server). Kepler does not teach optimization techniques, nor that the servers are multi-master servers. However, Parham teaches optimization techniques (See col. 4, lines 40-45 & 52-53; wherein the disclosed algorithm can be optimized for bandwidth, cost, distance or speed), and that the servers are multi-master servers (See col. 1, lines 45-48). Using the features of Parham in the system of Kepler would have

expanded the capabilities of Kepler to included distributed databases, and would have made the system more cost effective by allowing the system to use the most efficient paths to desired databases. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham with Kepler.

6. Regarding claim 30, this claim recites a machine-readable medium with instructions for carrying out the method of claim 1, and is rejected for the same reasons.

7. Regarding claim 31, this claim recites a machine-readable medium with instructions for carrying out the method of claim 2, and is rejected for the same reasons.

8. Regarding claim 34, this claim recites a machine-readable medium with instructions for carrying out the method of claim 5, and is rejected for the same reasons.

9. Regarding claim 40, this claim recites a machine-readable medium with instructions for carrying out the method of claim 11, and is rejected for the same reasons.

10. Claims 3, 6, 9, 10, 12, 13, 26, 29, 32, 35, 38, 39, 41 & 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham, as applied to claims 1, 11, 30 & 40 above, and further in view of U.S. Patent Application Publication No. 2004/0083479 to Bondarenko, et al. (Bondarenko).

11. Regarding claim 3, Kepler in view of Parham teach the invention as described in claim 1. Kepler and Parham do not teach the first request includes code of the Directory Services Markup Language. However, Bondarenko teaches the use of

Directory Services Markup Language (DSML) (See paragraph 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

12. Regarding claim 6, Kepler teaches a method comprising: receiving in a directory server a request to modify a directory, wherein the request is received from a server (See col. 3, lines 32-36), and wherein the server selected the directory server based on a technique associated with a technique identifier included in a request (See col. 14, lines 16-18; wherein the route-by field is the technique identifier), the technique identifier being one of a plurality of possible technique identifiers each associated with a respective technique of a plurality of possible techniques (See col. 6, lines 21-24 & 30-34, and col. 14, lines 16-18; wherein each field, including the "route by" field, includes an identifier, and wherein each field, including the "city" field, has a plurality of possible identifiers); modifying the directory (See col. 15, lines 61-64; wherein delete/insert is the modification); and transmitting a response to the server, wherein the response indicates success or failure of the modification (See col. 3, lines 38-40; wherein the responsive data indicates success or failure). Further, regarding claim 6, Parham teaches an optimization technique that is used to select a server (See col. 4, lines 40-45; wherein the shortest path algorithm is the optimization technique). Kepler, in view of Parham, do not teach the server is a Directory Services Markup Language (DSML) server.

However, Bondarenko teaches the use of a DSML server (See par. 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

13. Regarding claim 9, Kepler in view of Parham and Bondarenko teach the invention as described in claim 6. Bondarenko further teaches the request is formatted according to the Directory Services Markup Language (See col. 87, lines 8-13).

14. Regarding claim 10, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 6. Kepler further teaches the optimization technique is selected from a set consisting of: closest to caller, closest to principal or object, and closest to dynamic object X (See col. 9, lines 52-57; wherein the user is the caller/principal).

15. Regarding claim 12, Kepler, in view of Parham, teach the invention as described in claim 11. Kepler and Parham do not teach the first transaction request includes Directory Services Markup Language code. However, Bondarenko teaches the first transaction request includes Directory Services Markup Language code (See par. 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at

the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

16. Regarding claim 13, Kepler, in view of Parham, teach the invention as described in claim 11. Kepler and Parham do not teach the first transaction request includes a Simple Object Access Protocol (SOAP) comment, wherein the SOAP comment includes the optimization technique identifier. However, Bondarenko teaches the first transaction request includes a Simple Object Access Protocol (SOAP) comment, and wherein the SOAP comment includes the optimization technique identifier (See par. 56, lines 1-6, and par. 57, lines 1-7; wherein the entire request is transported using SOAP). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by SOAP, including transporting requests in a standard and accepted web-based protocol. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

17. Regarding claim 26, Kepler teaches a system comprising: a processor (40); a dynamic random access memory unit (42); a machine readable medium including instructions for performing the following operations, receiving in a directory server a request to modify a directory, wherein the request is received from a server (See col. 2, lines 32-36), and wherein the server selected the directory server based on an technique associated with a technique identifier included in a request (See col. 14, lines 16-18), the technique identifier being one of a plurality of possible technique identifiers each associated with a respective technique of a plurality of possible techniques (See

col. 6, lines 21-24 & 30-34, and col. 14, lines 16-18; wherein each field, including the "route by" field, includes an identifier, and wherein each field, including the "city" field, has a plurality of possible identifiers); modifying the directory (See col. 15, lines 61-64); and transmitting a response to the server, wherein the response indicates success of failure of the modification (See col. 3, lines 38-40). Further, regarding claim 26, Parham teaches an optimization technique that is used to select a server (See col. 4, lines 40-45). Kepler and Parham do not teach the server is a Directory Services Markup Language (DSML) server. However, Bondarenko teaches the use of a Directory Services Markup Language (DSML) server (See par. 87, lines 8-13). Using the features of Bondarenko in the system of Kepler in view of Parham would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Bondarenko with Parham and Kepler.

18. Regarding claim 29, Kepler in view of Parhma and Bondarenko teach the invention as described in claim 26. Kepler further teaches the optimization technique is selected from a set consisting of: closest to caller, closest to principal or object, and closest to dynamic object X (See col. 9, lines 52-57).

19. Regarding claim 32, this claim recites a machine-readable medium with instructions for carrying out the method of claim 3, and is rejected for the same reasons.

20. Regarding claim 35, this claim recites a machine-readable medium with instructions for carrying out the method of claim 6, and is rejected for the same reasons.

21. Regarding claim 38, this claim recites a machine-readable medium with instructions for carrying out the method of claim 9, and is rejected for the same reasons.

22. Regarding claim 39, this claim recites a machine-readable medium with instructions for carrying out the method of claim 10, and is rejected for the same reasons.

23. Regarding claim 41, this claim recites a machine-readable medium with instructions for carrying out the method of claim 12, and is rejected for the same reasons.

24. Regarding claim 42, this claim recites a machine-readable medium with instructions for carrying out the method of claim 13, and is rejected for the same reasons.

25. Claims 4, 14, 33 & 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham, as applied to claims 1, 11, 30 & 40 above, and further in view of U.S. Patent No. 7,376,827 issued to Jiao.

26. Regarding claim 4, Kepler, in view of Parham, teach the invention as described in claim 1. Kepler and Parham do not teach the second request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, in view of Parham, would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive

paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao with the system of Kepler and Parham.

27. Regarding claim 14, Kepler, in view of Parham, teach the invention as described in claim 11. Kepler and Parham do not teach the second transaction request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, in view of Parham, would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao with the system of Kepler and Parham.

28. Regarding claim 33, this claim recites a machine-readable medium with instructions for carrying out the method of claim 4, and is rejected for the same reasons.

29. Regarding claim 43, this claim recites a machine-readable medium with instructions for carrying out the method of claim 14, and is rejected for the same reasons.

30. Claims 7, 21-24, 27, 28, 36 & 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham and Bondarenko, and further in view of Jiao.

31. Regarding claim 7, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 6. Kepler, in view of Parham and Bondarenko, do not teach the request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, in view of Parham and Bondarenko, would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao with the system of Kepler and Parham.

Regarding claim 21, Kepler teaches a method comprising: receiving a request, wherein the request includes, a technique identifier, the technique identifier being one of a plurality of possible technique identifiers each associated with a respective technique of a plurality of possible techniques (See col. 3, lines 32-34, col. 6, lines 21-24 & 30-34, and col. 14, lines 16-18; wherein each field, including the "route by" field, includes an identifier, and wherein each field, including the "city" field, has a plurality of possible identifiers); and a first set of one or more directory server write requests (See col. 15, lines 64-65); creating a second set of one or more requests, wherein each of the requests includes at least one of the directory server write requests (See col. 3, lines 34-36); determining to which of a third set of geographically distributed directory servers the requests will be transmitted, wherein the determining includes using a technique

associated with the technique identifier (See col. 3, lines 36-37, and col. 14, lines 16-18), and wherein the technique selects those of the third set of servers based on a network location of one or more principals and one or more objects (See col. 9, lines 52-59); and transmitting ones of the second set of requests to ones of the third set of servers (See col. 3, lines 40-42). Kepler does not teach that the request is a DSML request, a plurality of optimization techniques, the one or more requests are LDAP requests, nor that the servers are multi-master servers. However: Parham teaches a plurality of optimization techniques that are used to select a server (See col. 4, lines 35-45 & 52-53; wherein the disclosed algorithm can be used to optimize bandwidth, cost, speed, distance or other factor; and col. 7, lines 11-17; wherein the optimization technique is customized based on network topology), and the use of multi-master servers (See col. 1, lines 45-48); Bondarenko teaches the use of DSML servers (See par. 87, lines 8-13); and, Jiao teaches the use of one or more LDAP requests (See col. 6, lines 41-43). Using the features of Parham in the system of Kepler would have expanded the capabilities of Kepler to included distributed databases, and would have made the system more cost effective by allowing the system to use the most efficient path to desired databases. Using the features of Bondarenko in the system of Kepler would have allowed the system to take advantage of the capabilities offered by DSML, including expressing directory queries, updates and results in an XML application. Using the features of Jiao in the system of Kepler would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information

delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Parham, Bondarenko and Jiao in the system of Kepler.

32. Regarding claim 22, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Parham further teaches the use of a secondary optimization technique (See col. 7, lines 43-46; wherein a technique other than shortest path is used).

33. Regarding claim 23, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Bondarenko further teaches the optimization technique identifier is located in a SOAP comment (See par. 56, lines 1-6, and par. 57, lines 1-7; wherein the entire request is transported using SOAP).

34. Regarding claim 24, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Jiao further teaches the network location of the one or more principals and the one or more objects is determined using one or more of a set of network location services (See col. 8, lines 7-9; wherein Domain Name System (DNS) is the location service).

35. Regarding claim 27, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 26. Kepler, in view of Parham and Bondarenko, do not teach the request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, Parham and Bondarenko would have allowed the system to take

advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao in the system of Kepler, Parham and Bondarenko.

36. Regarding claim 28, Kepler, in view of Parham and Bondarenko, teach the invention as described in claim 26. Kepler, in view of Parham and Bondarenko, do not teach the second request is formatted according to the Lightweight Directory Access Protocol (LDAP). However, Jiao teaches formatting requests according to the Lightweight Directory Access Protocol (See col. 6, lines 41-43). Using the features of Jiao in the system of Kepler, Parham and Bondarenko would have allowed the system to take advantage of mechanisms offered by LDAP, including the ability to determine the structure of information in a directory, and the ability to receive paged information delivery. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Jiao in the system of Kepler, Parham and Bondarenko.

37. Regarding claim 36, this claim recites a machine-readable medium with instructions for carrying out the method of claim 7, and is rejected for the same reasons.

38. Regarding claim 50, this claim recites a machine-readable medium with instructions for carrying out the method of claim 21, and is rejected for the same reasons.

39. Regarding claim 51, this claim recites a machine-readable medium with instructions for carrying out the method of claim 22, and is rejected for the same reasons.

40. Regarding claim 52, this claim recites a machine-readable medium with instructions for carrying out the method of claim 23, and is rejected for the same reasons.

41. Regarding claim 53, this claim recites a machine-readable medium with instructions for carrying out the method of claim 24, and is rejected for the same reasons.

42. Claims 25 & 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kepler, in view of Parham, Bondarenko and Jiao, as applied to claims 21 & 50 above, and further in view of U.S. Patent Application Publication No. 2003/0120502 to Robb, et al. (Robb), and U.S. Patent No. 6,006,331 to Chu, et al. (Chu).

43. Regarding claim 25, Kepler, in view of Parham, Bondarenko and Jiao, teach the invention as described in claim 21. Kepler, in view of Parham, Bondarenko and Jiao, do not teach the set of network location services include Session Initiation Protocol (SIP), and Internet Locator Service (ILS). However, Robb teaches the Session Initiation Protocol as a network location service (See par. 3, line 68), and Chu teaches the Internet Locator Service (ILS) as a network location service (See col. 5, lines 34-35). Using the features of Robb and Chu in the system of Kepler, in view of Parham, Bondarenko and Jiao, would have expanded the locating capabilities of the system,

thereby allowing faster location of servers, computers and users, and possibly locating more servers, computers and users than otherwise possible. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to combine the teachings of Robb and Chu in the system of Kepler, in view of Parham, Bondarenko and Jiao.

44. Regarding claim 54, this claim recites a machine-readable medium with instructions for carrying out the method of claim 25, and is rejected for the same reasons.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Seto whose telephone number is (571)270-7198.

The examiner can normally be reached on Monday thru Thursday and alt. Fridays, 9:30 AM-7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph E. Avellino can be reached on (571) 272-3905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JKS
10/28/2009

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